# **Operations Guide** POWER

### DX-112/212 Digital Guitar Amplifier CFFTE



### Welcome. Please, Read This:

We at Crate extend our sincere "welcome" into a whole new world: a world where the legendary performance of a musician-made Crate amplifier combines with the wonders of digital amp modeling and effects. We bring you the only amplifier you'll ever need: the Crate DX-112 / DX-212. The heart and soul of sixteen different amplifiers have been captured through the miracles of digital software engineering and placed into the DX amplifier. Not only does the amp sound like the originals, it performs like the originals, with the same tones and character of all your favorites - from vintage British grit to today's heavy metal with a wide variety in between.

Along with digital amp modeling comes sixteen digital effects, all designed to rock your world from here to Sunday. And, you can tweak each effect to your heart's content!

Got your own favorite effects? Not to worry – the DX amps have stereo line in and line out jacks for use as a stereo effects loop, or for connecting to an external stereo power amp. It's like having your cake and eating it, too - with extra icing!

The DX amplifier is programmable and can be controlled in a number of ways, including through the front panel keypad, with the optional Crate Foot Controller, or via MIDI.

> Within the pages of this Operating Guide you will find all sorts of pertinent, useful and sometimes technical information which we at Crate felt you ought to have. Please indulge us a bit and take the time to actually read through this Guide at some point. Until then, for those of you who just can't wait to plug in and go, we offer you:

### Quick Start: Plug In and Go! (page 1)

There you'll find just enough information to get you started. If you run into any situation that isn't covered in the Quick Start section, you might have to – guitar gods forbid – read this guide first.

We at Crate thank you for choosing the DX-112/212 Digital Guitar Amplifier!

### **Important Safeguards and Precautions**

All Crate products are designed for continuous safe operation, as long as common sense is used and steps are taken to help avoid certain problems. Abiding by the following rules can help prevent damage to your amplifier, yourself and others.

- The amplifier is equipped with a three-pronged AC power cord. To reduce the risk of electrical shock, NEVER remove or otherwise attempt to defeat the ground pin of the power cord.
- Connect the amplifier ONLY to a properly grounded AC outlet of the proper voltage for your preamp.
- Avoid sudden temperature extremes, rain and moisture. Also, avoid sudden and intense impact. (If the
  amplifier has been subjected to any of the preceding abuses, have it looked at by an authorized service center.)
- Unplug the amplifier before cleaning it. NEVER spray liquid cleaners onto the preamp. Wipe it with a slightly dampened, lint-free cloth to remove dirt and film.
- Don't use the amplifier if it has sustained damage to the chassis, controls, or power cord. Refer the
  unit to an authorized service center for inspection.
- NOTE: Amplifiers capable of producing high volume levels are also capable of inflicting permanent
  hearing loss or damage, if the exposure to such levels is prolonged. Such damage is progressive and
  irreversible! Caution is advised and ear protection is recommended when playing at extremely loud levels.

The chart below shows the U.S. Government Occupational Safety and Health Administration (OSHA) regulations which were in effect at the time of this publication for permissible noise exposure, per 29CRF1910, Table G-16.

SOUND LEVEL dBA	DURATION PER DAY	SOUND LEVEL dBA	DURATION PER DAY
SLOW RESPONSE	IN HOURS	SLOW RESPONSE	IN HOURS
90 92 95 97 100	8 6 4 3 2	102 105 110 115	

According to OSHA, any exposure in excess of those listed above could result in some hearing loss.







THIS EQUIPMENT HAS BEEN DESIGNED AND ENGINEERED TO PROVIDE SAFE AND RELIABLE OPERATION. IN ORDER TO PROLONG THE LIFE OF THE UNIT AND PREVENT ACCIDENTAL DAMAGES OR INJURY, PLEASE FOLLOW THESE PRECAUTIONARY GUIDELINES:

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN CHASSIS; DO NOT DEFEAT OR REMOVE THE GROUND PIN OF THE POWER CORD; CONNECT ONLY TO A PROPERTY GROUNDED AC POWER OUTLET.

CAUTION: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION: OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.

EXPLANATION OF GRAPHICAL SYMBOLS:



"DANGEROUS VOLTAGE" "DANGER HAUTE TENSION" "GEFAHLICHE SPANNUNG"



"IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL" "REFERREZ-VOUS AU MANUAL D'UTILISATION" "UNBEDINET IN DER BEDIENUNGSANLEITUNG NACHSCHLAGEN"

# DX-112/212 Digital Guitar Amplifier CRATE

QUICK START

CONNECTIONS

AMP MODELS

**EFFECTS** 

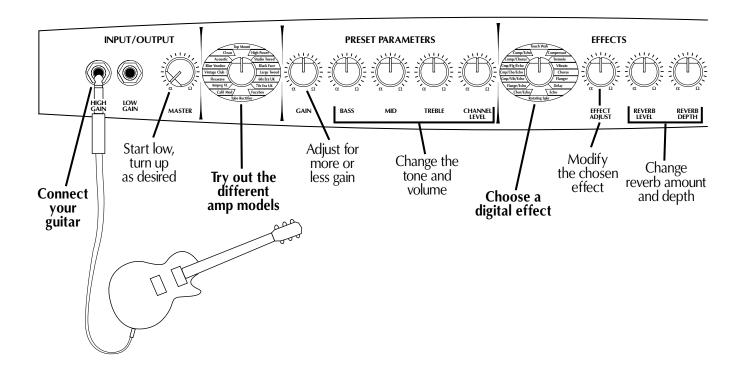
THE KEYPAD

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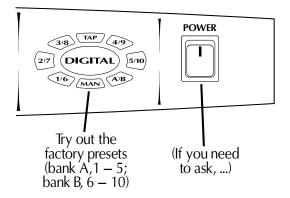
### Quick Start: Plug In and Go!

Making Sound:



### DX-112/212 Digital Guitar Amplifier CFFTE



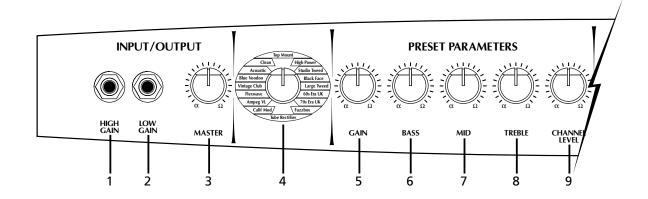


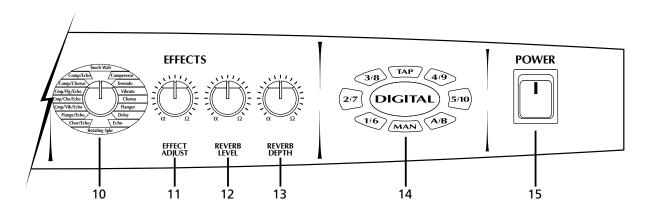
### Making Sound:

- · You may want to start out with the Master control turned down low, since this amp can get LOUD.
- · Connect your guitar, plug in the amp and turn it on.
- Select the manual mode by pressing the MAN button on the keypad.
- · Adjust the Gain control to get the amount of gain you want.
- Try out the amp models by turning the Amp Selector knob.
- Use the Bass, Mid, Treble and Channel Level controls to change the tone and volume. The EQ settings will vary depending on the amp model you choose.
- Choose a digital effect by turning the Effects Selector knob.
- · Modify the chosen effect by turning the Effect Adjust control.
- · Adjust the reverb by turning the Reverb Level and Depth controls.
- Try out the factory presets by pressing the numbered buttons and the A/B button on the Keypad.
  - •When first turned on, the A/B button is not lit, and the numbered buttons recall presets 1-5 (bank A). When you press the A/B button it lights up, and the numbered buttons recall presets 6-10 (bank B).

### Quick Start: Plug In and Go!

A Look at the Front Panel Controls:





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### The Front Panel:

- 1, 2. Inputs: Use High Gain for standard pickups, Low Gain for "hot" pickups and/or on-board active electronics.
- 3. Master: Sets the overall output level. The Master volume is the only non-programmable setting on the amplifier.
- 4. Amp Selector: Chooses the desired amp model.
- **5. Gain:** Adjusts the input gain.
- 6, 7, 8. Bass, Mid, Treble: Adjusts the signal tone.
- 9. Channel Level: Sets the output level of the current preset.
- 10. Effects Selector: Chooses the effect applied to the signal.
- 11. Effects Adjust: Changes one or more parameter of the current effect.
- 12. Reverb Level: Sets the amount of reverberation applied to the signal.
- 13. Reverb Depth: Changes the depth and high-frequency damping of reverberation, from a very small room (fully counter-clockwise) to a very large hall (fully clockwise).
- 14. Keypad: Recalls and saves presets, using the numbered buttons and the A/B button.
- 15. Power: Up is on!

### Refer to Section / Page:

"The Input Jacks" – page 7,8

"Descriptions of the Models" – page 11,12

"Equalization and Channel Level" - page 13,14

"Equalization and Channel Level" - page 13,14

"Equalization and Channel Level" - page 13

"Descriptions of the Effects" - page 15,16

"Effects Selection and Adjustment" – page 17,18

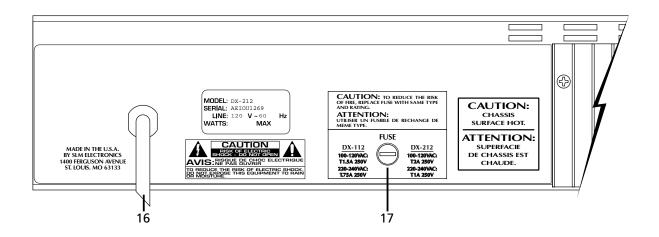
"Description of the Effects" - page 15,16

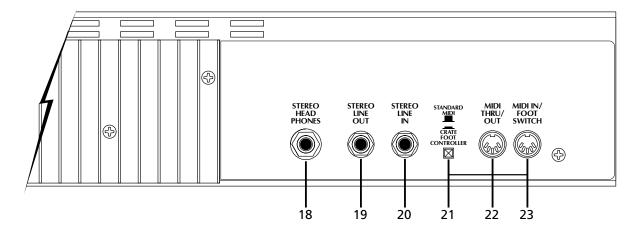
"The Keypad" - page 19,20

(These are the barest of the bare-bones descriptions - enough to get you started. Please check out the sections and pages noted for more information - this goes for the rear panel, too.)

### Quick Start: Plug In and Go!

A Look at the Rear Panel:





## DX-112/212 Digital Guitar Amplifier CFATE



### The Rear Panel:

- **16**. **AC Line Cord:** Plug the male end of this cord into a properly grounded AC outlet of the correct voltage. DO NOT DEFEAT THE **GROUND PIN OF THE AC PLUG!**
- 17. Fuse: The fuse protects the amplifier against damages caused by overload conditions in the unit. If the fuse blows, replace it only with the same size and type as indicated on the rear panel.
- 18. Stereo Headphones: For those private moments, plug a pair of stereo headphones into this jack. The internal speaker(s) is (are) muted when headphones are used. (Can also be used for recording.)
- 19. Stereo Line Out: Connect this output to a stereo amplifier or effects unit.
- 20. Stereo Line In: Connect the output of an external effects unit here.
- 21. Standard MIDI/Crate Footswitch Controller: This switch lets you choose how you control your DX-112/212 - via MIDI or with the optional Crate Foot Controller.
- 22. MIDI Thru/Out: Connect to another MIDI device you wish to control with the foot controller.
- 23. MIDI In/Foot Switch: This jack either accepts a standard MIDI input or lets you use the Crate Foot Controller.

### Refer to Section / Page:

"Stereo Headphones Jack" – page 9,10

"The Stereo Line In and Line Out Jacks" - page 7,8

"The Stereo Line In and Line Out Jacks" - page 7,8

"Using the Crate Foot Controller" - page 9,10

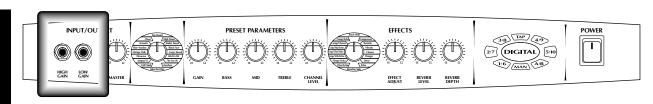
"The MIDI Thru/Out Jack" - page 9,10

"Using a MIDI Footswitch" - page 9,10

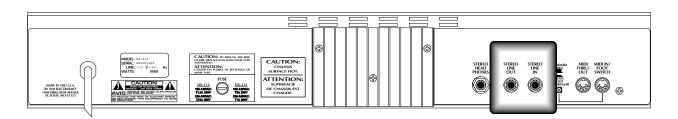
(That's all we're gonna give you for now! To learn a whole lot more, read the rest of this guide!)

### Making the Right Connections

The Input Jacks:



### The Stereo Line In and Line Out Jacks:





### The Input Jacks:

The DX-112/212 has two input jacks - High Gain (straight) and Low Gain (padded) - to accommodate a wide range of pickups and playing styles. The jack you use depends on your type of pickups and the sounds you're after.

For example, most players will plug their guitars into the High Gain jack. These players include those with "normal output" pickups and some players with "hot" pickups who are looking for some added distortion.

Some players will choose the Low Gain jack. These players are mostly those with "hot"/active pickups who want a cleaner sound, with more headroom for the Gain control.

When nothing is plugged into either jack, the DX-112/212 mutes its internal speaker(s).

### The Stereo Line Out/In Jacks:

The DX-112/212 has a Stereo Line In and Line Out jack (rear panel), for use as a stereo effects loop, or to send a preamplified signal to an external stereo power amp.

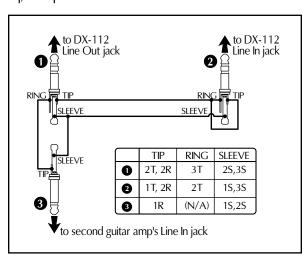
To use an effects loop, connect the Line Out jack to the input of the effects device, then connect the output of the device to the Line In jack.

To send a preamplified signal, connect a stereo signal cable from the Line Out jack to the input of the stereo power amplifier.

The jacks are wired as follows: TIP = left channel, RING = right channel, SLEEVE = ground.

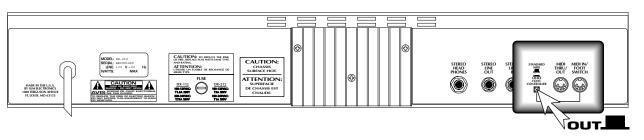
The Line Out jack signal is post master, post eq, and post effects.

•If you want to connect a DX-112 to another guitar amplifier for stereo sound, you'll need to make a custom patch cable like the one shown to the right. Use this cable to connect your DX-112 Line Out jack to the Line In jack of the second guitar amp AND the DX-112 Line In jack.

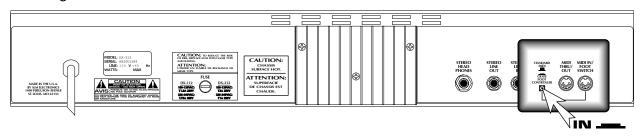


### Making the Right Connections

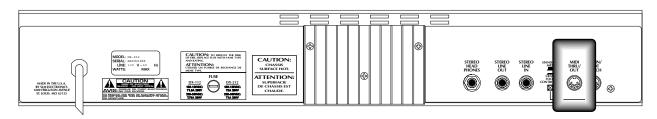
### Using a MIDI Footswitch:



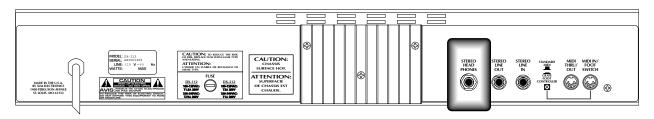
### Using the Crate Foot Controller:



### The MIDI Thru/Out Jack:



### The Stereo Headphones Jack:



### DX-112/212 Digital Guitar Amplifier CHATE



### Using a MIDI Footswitch:

You can store and recall a total of 100 presets when using a MIDI footswitch. These presets are accessed by MIDI program numbers 0 through 99. (Also, see the MIDI Implementation Chart, Appendix B, page 45.)

> WARNING: The MIDI In/Crate Foot Controller button must be in the OUT position for MIDI operation. (The IN position applies power to the Crate Foot Controller which could cause damage to another type of MIDI footswitch.)

### Using the Crate Foot Controller:

The optional Crate Foot Controller (model DX-FC) lets you store and recall a total of 100 presets and allows foot control of the tap tempo function. The controller gets its power straight from the amplifier, so no external power source or batteries are needed!

Plug the connecting cable into the MIDI In/Foot Switch jack and set the MIDI In/Crate Foot Controller button to the IN (foot controller) position. This applies the power needed for the Crate Foot Controller.

(See the Foot Controller's User's Guide for more complete information-when you get one!)

### The MIDI Thru/Out Jack:

The MIDI Out/Thru jack lets you control other MIDI devices with the Foot Controller. Connect this jack to the MIDI In jack of the device you wish to control.

The MIDI Thru works with either a standard MIDI input (footswitch) or with the Crate Foot Controller plugged into the MIDI In jack, since the Crate Foot Controller sends standard MIDI messages.

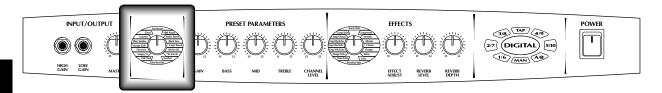
### The Stereo Headphones Jack:

Plug a pair of stereo headphones into this jack, for private listening. The internal speaker(s) is (are) disconnected when headphones are used. The headphones signal is speaker compensated for a realistic sound even without a guitar speaker cabinet. Since this amp can play LOUD, be careful when using headphones – prolonged exposure to those high dB levels can wreak havoc on your eardrums!

The Headphones Jack can also be used as a stereo direct out for recording.

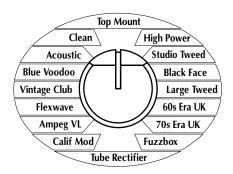
### The Amp Models

Description of the Models:



The DX-112/212 is actually 16 different amplifiers in one! The software inside the amplifier convinces the signal that it's going through the electronic components of the original amplifier, giving it all of the characteristics of that amp! (More or less — it's really a lot more technical than that, but you get the picture. For a slightly more technical description, see Appendix A on page 43.)

Use the amp selector knob to choose which amp model you want. The chart on the following page lists the name we gave the amp model, the "make and model" of the amp we emulated, and a brief description of the original amp.



# DX-112/212 Digital Guitar Amplifier TRITE

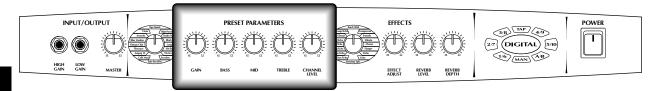
Model Name	Modeled After the	<b>Brief Description</b>
Top Mount	Vox AC 30	Bright with a great clean sound at low gain, distorts smoothly at high gain settings — an early 60's amp with lots of 2nd and 3rd order harmonics, favored by the Beatles for the rhythm and lead tracks in their early days
High Power	Hi Watt DR	An early 60's "upmarket" alternative to the popular Marshall amp $-$ louder and cleaner than most
Studio Tweed	Fender Deluxe 5E3	The sound from which Rock 'n' Roll was born — Fender's early 50's claim to fame
Black Face	Fender Deluxe Reverb AA763	The classic tube amp — one of the first amps with reverb, a mid- $60$ 's staple to the rock and roll diet (considered by some to be one of the best amps ever made)
Large Tweed	Fender Bassman 5F6-A	Originally designed for bass, favored by guitarists for its big sound – a late $50^{\circ}\mathrm{s}$ classic
60s Era UK	Marshall 1959	The renowned "brown sound" — a softer, smoother Marshall than the more modern creations
70s Era UK	Marshall JCM 800	The sound of ROCK! – loud and powerful with a definitive edge
Fuzzbox	Dallas-Arbiter Fuzz Face	Jimi would be proud – the classic stomp box distortion of his day
Tube Rectifier	Mesa-Boogie Dual Rectifier	Barre chord Heaven — the beginning of the modern high-gain amp era
Calif Mod	Mesa-Boogie Mark IIC+	Tons of overdrive and sustain; the sound of Santana! — the hot-rodded powerhouse Simul-Class amplifier
Ampeg VL	Ampeg VL-501	A hot-rodded Marshall-style amp $-$ powerful, lots of distortion and multiple gain stages $$
Flexwave	Crate GX-140C	The massively overdriven, solid state Crate sound preferred by Metal-Heads everywhere – a solid-state competitor for most classic tube amps due to Crate's proprietary FlexWave circuitry
Vintage Club	Crate VC-60	A unique combination of both modern high-gain and classic tube amps – bringing back the "vintage" sound of the early days of rock
Blue Voodoo	Crate BV-60	Awesome modern high-gain tone – smooth, clean, and powerful
Acoustic	Boss AC-1 Acoustic Simulator	Makes your electric guitar sound like an acoustic
Clean	Crate GX-140C	Clean Jazz sound — just enough of a an edge to get your message across

### All-important, legal, "cover-our-rear-ends" blurb!

Vox, Hi Watt, Fender, Marshall, Dallas-Arbiter, Mesa-Boogie, Boss, and the names of their respective products are all trademarks of their respective companies, and have no affiliation with Crate and/or SLM Electronics, or with the DX-112/212 amplifier. These companies and their products are acknowledged herein because we listened to their stuff and modeled some of their sounds into our amplifier. Also, the above descriptions are paraphrased synopses of many of our own experiences with the amplifiers, along with information from the "The Tube Amp Book, 4th Edition."

### The Amp Models

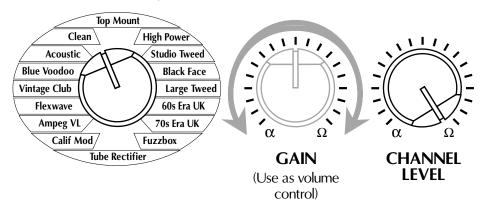
**Equalization and Channel Level:** 



Each DX-112/212 amp model has its own specifications and placement in the signal chain for its Gain, Bass, Mid, and Treble. (In other words, the controls affect the signal the same in the amp model as they do on the original amplifier.)

Use the Preset Parameter controls (Gain, Bass, Mid, Treble, Channel Level) to change the gain, eq and volume of the selected amp model. The chart on the following page lists the model name and the specifications/placement for the Drive and EQ controls.

TIP! When using the Acoustic or Clean amp models, set the Channel Level to maximum and use the Gain control for your volume level.



# DX-112/212 Digital Guitar Amplifier TRITE

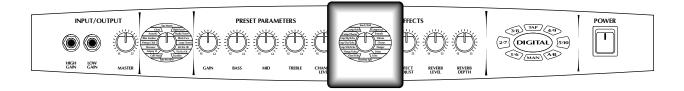


### All-important, legal, "cover-our-rear-ends" blurb! Again!

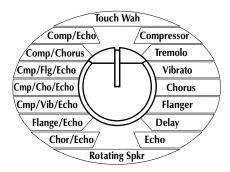
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### **The Digital Effects**

Description of the Effects:



The DX-112/212 has 16 built-in digital effects, each with one or more adjustable parameters. The chart on the following page lists the name of the effect and gives a brief description.



NOTE: The DX-112/212 has built-in noise reduction to ensure a more quiet operation. This circuit is always active when the amp is on.

DX-112/212	Digital	Guitar	Amplifier	
			-	-

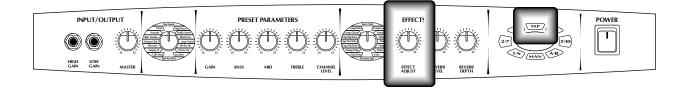
Effect	Stereo?	Description
Touch Wah		Functions as an Auto-Wah (Touch Wah) or normal wah-wah when used with an expression pedal and the optional Crate Foot Controller
Compressor		Limits the dynamic range of the signal – increases the apparent sustain of the signal (applied pre-amplifier model)
Tremolo		Modulates the amplitude of the signal
Vibrato		Modulates the pitch of the signal
Chorus	Yes	Thickens the original signal with slowly pitch-modulated and delayed versions of the original signal
Flanger		Adds a slowly time-varying version of the original signal
Delay		Adds a delayed version of the signal
Echo		Adds a delayed signal with regeneration
<b>Rotating Speaker</b>	Yes	Reproduces the classic sound of a Leslie rotating speaker
Chorus/Echo	Yes	A combination of chorus and echo
Flange/Echo		A combination of flange and echo
Compressor/Vibrato/Echo		A combination of compressor (pre-amplifier model) and vibrato and echo (post-amplifier model)
Compressor/Chorus/Echo	Yes	A combination of compressor (pre-amplifier model) and chorus and echo (post-amplifier model)
Compressor/Flange/Echo		A combination of compressor (pre-amplifier model) and flange and echo (post-amplifier model)
Compressor/Chorus	Yes	A combination of compressor (pre-amplifier model) and chorus (post-amplifier model)
Compressor/Echo		A combination of compressor (pre-amplifier model) and echo (post-amplifier model)
Reverb Level and Depth (separate from the Effects Selector knob)	Yes	Reproduces the sound of a reverberant room

Yet another important legal blurb!

Leslie is a registered trademark of Hammond Suzuki USA, Inc.

### **The Digital Effects**

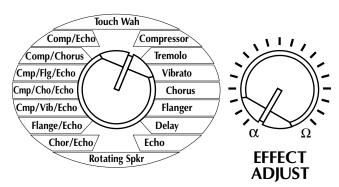
**Effects Selection and Adjustment:** 



Each of the digital effects has one or more parameters you can change by using the Effects Adjust control. All of the effects (except the compressor and the Touch Wah) can also be changed by using the Tap function — either through the Keypad, or with the Crate Foot Controller. The chart on the following page lists the effects along with the parameter(s) affected by the Effects Adjust knob and the Tap button.

NOTE: On multi-effects, modulation speed and echo time are set simultaneously by the Tap button.

• To bypass effects, turn the Effect Adjust control fully counter-clockwise and select the Compressor effect. (Notice the chart on page 18: There is no compression with the Effect Adjust knob full counter-clockwise, therefore no effects are applied to the signal — thus, "effects bypass.")



# DX-112/212 Digital Guitar Amplifier TRITE

Effect	Effect Adjust knob controls:	Tap button controls:	See Note(s
Touch Wah	Sensitivity (Auto-Wah only)		
Compressor	Ratio (See Below*)	<del></del>	
Tremolo	Depth of Amplitude Modulation	Speed: 2 cycles/tap	
Vibrato	Depth of Pitch Modulation	Speed: 2 cycles/tap	
Chorus	Level of Chorused Signal	Speed: 1 cycles/tap	
Flanger	Max. Time Delay: 0-5ms	Speed: 1/4 cycle/tap	1
Delay	Level of Delayed Signal	Time: .033-1.12 sec	2
Echo	Regeneration	Time: .033-1.12 sec	2
Rotating Speaker	Depth of Amplitude/Pitch Mod'n	Speed: 2 cycles/tap	
Chorus/Echo	Chorus Level, Echo Regeneration	Chorus Speed: 1 cycle/tap, Echo Time: .033-1.12 sec	2
Flange/Echo	Echo Regeneration	Flange Speed: 1/4 cycle/tap, Echo Time: .033-1.12 sec	1,2
Compressor/Vibrato/Echo	Vibrato Depth, Echo Regeneration	Vibrato Speed: 2 cycles/tap, Echo Time: .033-1.12 sec	2,3
Compressor/Chorus/Echo	Chorus Level, Echo Regeneration	Chorus Speed: 1 cycle/tap, Echo Time: .033-1.12 sec	2,3
Compressor/Flange/Echo	Echo Regeneration	Flange Speed: 1/4 cycle/tap, Echo Time: .033-1.12 sec	1,2,3
Compressor/Chorus	Chorus Level	Chorus Speed: 1 cycle/tap	2,3
Compressor/Echo	Echo Regeneration	Echo Time: .033-1.12 sec	2,3

Note 1: Mix fixed at 50%

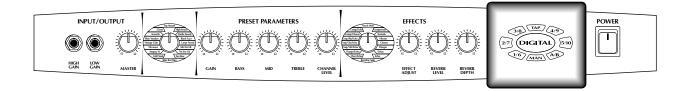
Note 2: Tap periods exceeding 1.12 seconds are automatically adjusted to an allowable echo/delay time that fits the current tempo

Note 3: Compression ratio fixed at 10:1

<sup>\*</sup> The table to the right shows how the Effect Adjust control changes the compression ratio when the Compressor ONLY is chosen.

approx rotation of	compression
approx rotation of Effect Adjust control (%)	ratio
0	1:1 (no compression)
30	2:1
40	3:1
50	4:1
60	6:1
70	10:1
80	20:1
90	100:1
100	∞:1

### The Keypad



The DX-112/212's Keypad has many uses — aside from recalling presets (as mentioned in the QuickStart part of this guide):

### **Recalling the Presets:**

There are ten presets accessible from the keypad, in two banks of five per bank: with the A/B button off (not lit), the numbered buttons to recall presets 1–5 (bank A); with the A/B button lit, the buttons recall presets 6–10 (bank B). Each preset stores its own set of parameters (amp selection, tones, level, effect, etc.). Once a preset is selected, turning a knob will change that knob's setting only – the other settings will electronically remain at their virtual positions until you change them.



"What's a virtual position?" (Good Question!) It's the setting that the amp remembers for each knob when a preset is stored. Example: Let's say the Gain control was at 10:00 when preset 1 was saved, then changed to the 3:00 position. The actual setting for the knob is 3:00. Recall preset 1 and even though the knob is physically pointing to 3:00, the amp acts as if the knob were set to the 10:00 position — because that's the virtual position for that knob in preset 1. (Got it?)

### **Saving New Presets:**

Once you get a sound setting you want to keep, assigning it to a preset button is easy: press and hold the desired button (1-5, bank A; 6-10, bank B) until the keypad flashes (about 3 seconds). The settings are now stored at that preset location.

(NOTE: The charts on pages 23 through 42 give you a place to record the settings for your presets. Presets 1–10 are accessible through the keypad, presets 11–100 are accessible by use of the optional Crate Footswitch Controller)

# DX-112/212 Digital Guitar Amplifier CHATE



### The Tap Button:

The Tap button lets you match the delay time and modulation speeds of the effects (except for the compressor, which has no delay or modulation) to the tempo of the piece you're playing. Just tap your finger in time to the beat, on the Tap button of course, and the selected effect will change accordingly. The Tap button flashes in time with its tempo.

(NOTE: The chart on page 18 lists specifically what the Tap button controls for each effect setting.)

### The Manual ("MAN") Button:

When you call up a preset, the preset remembers how the controls were set when the preset was stored (their virtual positions), and basically ignores their current settings. Pressing the Manual button makes the amp pay attention to the actual positions of the controls and applies their settings to the sound.

### Another function of the Manual button:

• Restoring Factory Default Presets: To restore the presets to their original factory settings, press and hold the Manual button and button #5 until the keypad flashes (about 3 seconds). Then turn the amp off, wait five seconds, and turn it back on. The presets are now restored to the original factory settings.

> WARNING! Restoring the factory presets wipes out any and all changes you've made and any new presets you've stored, so use it carefully.

### Other things you should know about the lit buttons:

- As soon as you change any of the controls (except for the Master volume), the preset button starts flashing. That's its way of saying "Hey! You've changed me!" A tap on the flashing button returns the preset to its original parameters - and makes the button stop flashing. Of course, you can save the changes, as described under "Saving New Presets" on the facing page.
- When you change banks, the preset button will go out as soon as you press the A/B button, but no other changes are made until another numbered button is pressed. In other words, although there is a visual change, the amp won't store the preset or switch to a different one (depending on how long you press the numbered button) until you want it to.

### FACTORY PRESETS 1—5 - BANK A (A/B BUTTON NOT LIT)

These two pages show the first ten factory presets for your DX-112/212 amplifier. Use the numbered buttons and the A/B button on the keypad to access them. (The following pages provide you with charts for your favorite presets.)

Preset #1	We call it: _	"Unplugged"	TAP = $\frac{N/A}{}$ beats/minute
AMP MODEL: Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calf Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK	Comp/Chorus Cmp/Chorus	h Wah pressor mole

Preset #_2	We call it: _	"60's Rock"	TAP = 102 beats/minute
AMP MODEL:  Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calf Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60S Era UK 70S Era UK Fuzzbox	FFFECT: Comp/Echo Comp/Chorus	α α α α α α α α α α α α α α α α α α α

Preset #_3	We call it: _	"Live at Leeds"	TAP = <u>114</u> beats/minute
AMP MODEL:  Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	FFFECT: Comp/Echo Comp/Chorus	EFFECT REVERB REVERB ADJUST LEVEL DEPTH

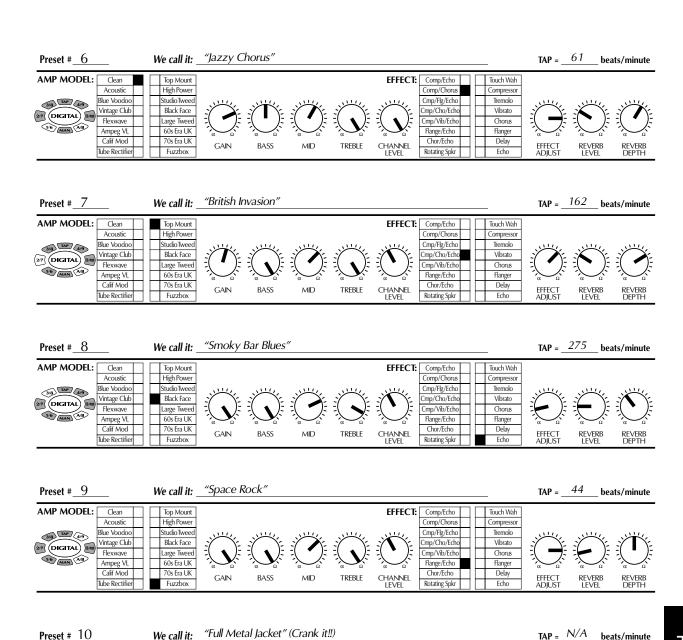
Preset #4	We call it: _	"Voodoo Child"	TAP = $\frac{N/A}{}$ beats/minute
AMP MODEL:  Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK	FFFECT: Comp/Echo Comp/Chorus	=

Preset #5	We call it:	"Arena Rock"		$TAP = \underline{62}$	2 beats/minute
AMP MODEL:  Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	FEFFECT: Comp/Etho Comp/Chorus  Comp/Chorus	Tremolo Vibrato		EEVERB REVERB LEVEL DEPTH

# DX-112/212 Digital Guitar Amplifier CHATE



### FACTORY PRESETS 6-10 - BANK B (A/B BUTTON LIT)



EFFECT: Comp/Echo

CHANNEL LEVEL

TREBLE

Comp/Chorus

Cmp/Flg/Echo

Cmp/Cho/Echo

Cmp/Vib/Echa

Flange/Echo

Chor/Echo

Rotating Spkr

Touch Wah

Compressor

Tremolo

Vibrato

Chorus

Flanger

Delav

Echo

AMP MODEL:

3/8 TAP 4/9

27 (DIGITAL) 510

1/6 MAN A/B

Clean

Acoustic

Blue Voodoo

Vintage Club

Flexwave

Calif Mod

Tube Rectifier

Ampeg VL

Top Mount

Studio Tweed

Black Face

Large Tweed

60s Fra UK

70s Era UK

Fuzzbox

GAIN

BASS

MID

REVERB DEPTH

REVERB LEVEL

EFFECT ADJUST

### USER PRESETS 1-5-BANK A

**Playing Favorites:** Use the blank charts in this section to record the knob settings of your favorite presets. (We suggest using a pencil so you can go back and make changes later. You could also photocopy one of the pages while it's still blank.)

	pnotoc	copy one of the p	bages whil	e it's still blank.)					
Preset #1_	I think I'll call it:_					_ Set TA	P for	beat	ts/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Black Face Flexwave Large Tweed Ampeg VL 608 Era UK Calif Mod Tos Era UK Tube Rectifier Fuzzbox	GAIN BASS	MID MID	ا بيدر بيدر	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo Rotating Spkr		FFECT ADJUST	α Ω REVERB LEVEL	REVERB DEPTH
Preset # 2	I think I'll call it:_					_ Set TA	.P for	beat	ts/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Virtage Club Black Face Flexwave Large Tweed Ampeg VL 60s Era UK Calif Mod Tos Era UK Tube Rectifier Fuzzbox	GAIN BASS	MID AID		Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vb/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo A	FFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #3_	I think I'll call it:_					_ Set TA	.P for	beat	ts/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Black Face Flexwave Large Tweed Ampeg VI. 605 Fra UK Calif Mod 705 Era UK Tube Rectifier Fuzzbox	$\begin{array}{cccc} & & & & & & & \\ & & & & & & & \\ & & & & $	MID MID	CHECK ONE)  CHECK ONE)  CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Hange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	α Ω Ω REVERB LEVEL	REVERB DEPTH
Preset #4	I think I'll call it:_					_ Set TA	.P for	beat	ts/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier Clean Top Mount High Power Studio Tweed Black Face Black Face Large Tweed 605 Era UK Tob Era UK Fuzzbox	GAIN BASS	MID MID	CHECK ONE)  TREBLE CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Iremolo Vibrato Chorus Flanger Delay Echo	FFECT IDJUST	α Ω Ω REVERB LEVEL	α Ω REVERB DEPTH
Preset # <u>5</u>	I think I'll call it:_					_ Set TA	.P for	beat	ts/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed	N11, N11,	,, <u>,</u>	EFFECT: (CHECK ONE)	Comp/Echo Comp/Chorus Cmp/Flg/Echo	Touch Wah Compressor Tremolo	<u> </u>	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	N±1,

Cmp/Cho/Echo

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

Vibrato

Chorus Flanger Delay

Echo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

# **FAVORITES**

beats/minute

Set TAP for

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

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### USER PRESETS 6-10 - BANK B

Preset # 6 I think I'll ca	all it:	Set TAP for beats/minute
Acoustic   Blue Voodoo   Studio   Vintage Club   Black   Flexwave   Ampeg Vt.   Calif Mod   70s E	Wount Power Tiveed Ta UK GAIN BASS MID TREBLE CHANNEL LEVEL  Comp/Etho Comp/Chorus Cmp/Flg/Etho	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo ADJUST TeveRB REVERB DEPTH
Preset #7 I think I'll ca	all it:	Set TAP for beats/minute
Acoustic   High	Mount Power Tiweed Gau K Gau K Gau N Gal N BASS MID TREBLE CHANNEL LEVEL  Comp/Echo Comp/Chorus Cmp/Hg/Echo Cmp/Vb/Echo Cmp/Vb/Echo Cmp/Vb/Echo Cmp/Vb/Echo Cmp/Vb/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo ADJUST LEVEL TOUCH Wah Compressor Tremolo  Vibrato Chorus
Preset # <u>8</u> I think I'll ca	all it:	Set TAP for beats/minute
Acoustic   High	Wount Power Tiweed Gau K	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo ADJUST LEVEL TOUCHWAH Compressor Tremolo Vibrato Chorus ACT Chorus FLANGER REVERB DEPTH
Preset #_9 I think I'll ca	all it:	Set TAP for beats/minute
Acoustic         High I           Blue Voodoo         Studio           Vintage Club         Black           Flexwave         Large           Ampeg VL         60s E	Wount Power Tiveed Ta UK GAIN BASS MID TREBLE  TREBLE  Comp/Echo Comp/Ho/Echo Comp/Echo C	Touch Wah Compressor Fremolo Vibratio Chorus Flanger Delay Echo ADJUST LEVEL  Touch Wah Compressor Fremolo A Di Touch Wah Compressor Fremolo A

CHECK ONE) Comp/Echo Comp/Chorus

TREBLE

Comp/Chorus

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Ech

Flange/Echo

Chor/Echo

Rotating Spkr

Preset #\_10

AMP MODEL: (CHECK ONE)

Clean

Acoustic

Blue Voodoo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

I think I'll call it:

Top Mount

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

High Power StudioTweed

### USER PRESETS 11-16 - BANK A

NOTE: Presets 11-100 are only accessable through the optional Crate Foot Controller

Preset # 11 I think I'll call it:	Set TAP for _	beats/minute
AMP MODEL: Clean   Top Mount   Top Mount   CHECK ONE)   Comp/Edo   Comp/Chorus   Check ONE)   Comp/Chorus   Comp/C	Touch Wah Compressor Tremolo Vibratio Chorus Flanger Delay Echo EffECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset #	_ Set TAP for _	beats/minute
AMP MODEL: Clean   Top Mount   High Power   High Power   CHECK ONE)   Comp/Echo   Comp/Chorus   Comp	Touch Wah Compressor Fremolo Vibrato Chorus Flanger Delay Echo EffECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_13 I think I'll call it:	Set TAP for	beats/minute
AMP MODEL: Clean (CHECK ONE)   Acoustic   High Power   Studio fiveed   Black Face   Large Tweed   Ampeg VL   Calif Mod   Tos Era UK   Tobe Rectifier   Tours	Touch Wah Compressor Fremolo Voltrato Chorus Flanger Delay Effect Adjust	REVERB REVERB LEVEL DEPTH
Preset # 14	_ Set TAP for _	beats/minute
AMP MODEL: Clean (CHECK ONE)  Acoustic Blue Voodoo   Studio Tweed   Vintage Club   Flexware   Ampeg VL   Calif Mod   ToS Fra UK   ToS Fra UK   Top Mount   TREBLE   CHANNEL   CHANNEL   Chor/Echo   Top Mount   CHECK ONE)   Comp/Chorus   Cmp/Flg/Echo   Cmp/Cho/Echo   Cmp/Cho/Ech	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo Delay EFFECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset # 15	_ Set TAP for _	beats/minute
AMP MODEL: Clean (CHECK ONE)   Acoustic   High Power   Studio Tweed   High Power   Studio Tweed   High Power   Comp/Chorus   Com	Touch Wah Compressor Temolo Vibrato Chorus Flanger Delay Echo Temolo The Temo	REVERB DEPTH

# **FAVORITES**

beats/minute

Set TAP for

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

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### USER PRESETS 16-20 - BANK B

Preset #_16	I t	hink I'll call it:							_ S	et TAP for _	bea	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	*/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BASS	MID	(CI	EFFECTI HECK ONE) a a a CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset # <u>17</u>	I t	hink I'll call it:							_ So	et TAP for _	bea	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	*/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BASS	MID MID	(CI	EFFECT: HECK ONE) \( \alpha \) \( \alpha \)		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_18	I t	hink I'll call it:							_ S	et TAP for	bea	ats/minute
Preset # 18 AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	hink I'll call it:  Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	->\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BASS	MID MID	(CI	EFFECT. HECK ONE)	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Vho/Echo Enp/Vho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	et TAP for	bea	ats/minute
AMP MODEL:	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Far UK 70s Fra UK Fuzzbox	GAIN	BASS	MID		HECK ONE)	Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT	REVERB LEVEL	REVERB
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Far UK 70s Fra UK Fuzzbox	GAIN	BASS BASS	MID MID	TREBLE	HECK ONE)	Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH

CHECK ONE) Comp/Echo Comp/Chorus

TREBLE

Comp/Chorus

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Ech

Flange/Echo

Chor/Echo

Rotating Spkr

Preset #\_20

AMP MODEL: (CHECK ONE)

Clean

Acoustic

Blue Voodoo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

I think I'll call it:

Top Mount

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

High Power StudioTweed

### USER PRESETS 21-25 - BANK A

Preset # 21 I think I'll call it:	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Viritage Club Black Face Flexwave Large Tweed	ouch Wah compressor Tiernolo Vibrato Chorus Flanger Delay Echo Echo Echo Echo Expressor EFFECT Echo EDUST	REVERB REVERB LEVEL DEPTH
22		
Preset #_22   I think I'll call it:	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Vintage Club Black Face Flexwave Large Tweed	ouch Wah ompressor Tremolo Vibrato Chorus Flanger Delay Echo Echo Echo Echo Edy	REVERB REVERB LEVEL DEPTH
Preset # 23	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Viritage Club Black Face Flexwave Large Tweed	ouch Wah compressor Tremolo Vibrato Chorus Telanger Delay EFFECT Echo END END EFFECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_24   I think I'll call it:	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Virtage Club Black Face Flexwave Large Tweed	ouch Wah compressor Tremolo Vibrato Chorus Flanger Delay EFFECT Echo EFFECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset # 25	C. L. TAR S	Laterateria
	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Vintage Club Black Face Flexwave Large Tweed	ouch Wah ompressor Tiremolo Vibrato Chorus Flanger Delay Echo EFFECT ADJUST	REVERB REVERB LEVEL DEPTH

# **FAVORITES**

beats/minute

Set TAP for

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

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### USER PRESETS 26-30 - BANK B

Preset # <u>26</u> I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean (CHECK ONE)  Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier  Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK Tube Rectifier  Top Mount High Power High Power Studio Tweed 60s Fac UK Tobs Era UK Fuzzbox	(CHECK ONE) Comp/Chorus Cmp/Flg/Echo Tre    Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Cho/Echo Chor/Echo Cho	th Wah pressor molo brato norus inger eelay cho	REVERB REVERB LEVEL DEPTH
Preset # 27   I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL:   Clean   Top Mount	(CHECK ONE) Comp/Chorus Cmp/Flg/Echo Ire  a a a a a a a a a a a a a a a a a a a	th Wah pressor molo brorus inger velay cho	REVERB REVERB LEVEL DEPTH
Preset # 28 I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean Acoustic Blue Voodoo Vintage Club Elarge Free Large Free Lar	(CHECK ONE) Comp/Chorus Cmp/Flg/Echo Ire  a a a a a a a a a a a a a a a a a a a	th Wah pressor molo brato norus nnger elelay cho ADJUST	REVERB REVERB LEVEL DEPTH
Preset # 29   I think I'll call it:		Set TAP for _	beats/minute

EFFECT: Comp/Echo
(CHECK ONE) Comp/Chorus

TREBLE

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Ech

Flange/Echo

Chor/Echo

Rotating Spkr

Preset #\_30

AMP MODEL: (CHECK ONE) Clean

Acoustic

Blue Voodoo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

I think I'll call it:

Top Mount

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

High Power StudioTweed

### USER PRESETS 31-35 - BANK A

Preset #_31	I think I'll call it:					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		GAIN BASS	MID MID	TREBLE CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Vb/Echo Flange/Echo Flange/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_32	I think I'll call it:					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		GAIN BASS	MID	CHECK ONE  TREBLE CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Vb/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	α Ω EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_33	I think I'll call it:					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	MID Δ	CHECK ONE  TREBLE  CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	α Ω REVERB LEVEL	REVERB DEPTH
Preset #_34	I think I'll call it:	·				Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	MID Λ	CHECK ONE  TREBLE  CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Hg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_35	I think I'll call it:					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	MID ΛΙΕ	(CHECK ONE		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay	εFFECT	α Ω Ω REVERB	α Ω Ω REVERB

beats/minute

Set TAP for

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

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### USER PRESETS 36-40 - BANK B

Preset #_36		think I'll call it:							_ S	et TAP for _	be	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	GAIN	BASS	- α Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω	(CI	EFFECT: HECK ONE) \(\alpha\) \(\alpha\) \(\		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_37		think I'll call it:							_ So	et TAP for	be	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	GAIN	BASS	MID MID	(CI	EFFECT: HECK ONE) \( \times_{\alpha} \times_{		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_38		think I'll call it:							_ S	et TAP for _	be	ats/minute
Preset # 38  AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	think I'll call it:  Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	.; <u>;'</u> '''''''''	BASS	λίτι// α Ω Ω MID	(CI	EFFECT: HECK ONE)	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	et TAP for	be.	ats/minute
AMP MODEL:	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK	GAIN	BASS	MID		HECK ONE)	Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vlb/Echo Flange/Echo Chor/Echo	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	Σ Ω Ω Ω EFFECT	REVERB LEVEL	REVERB DEPTH
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Fra UK	GAIN	BASS BASS	MID MID	TREBLE	HECK ONE)	Comp/Chorus Cmp/Flg/Etho Cmp/Cho/Etho Cmp/Vb/Etho Flange/Etho Chor/Etho Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect Adjust	REVERB LEVEL	REVERB DEPTH

CHECK ONE) Comp/Echo Comp/Chorus

TREBLE

Comp/Chorus

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

Preset #\_40

AMP MODEL: (CHECK ONE)

Clean

Acoustic

Blue Voodoo

Vintage Club

Ampeg VL

Calif Mod

Tube Rectifier

I think I'll call it:

Top Mount

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

High Power StudioTweed

### USER PRESETS 41-45 - BANK A

Preset #_41 I think I'll call it:	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Vintage Club Flexware Ampeg VI. Cali Mod  Call Mod  CHECK ONE) Comp/Chorus Comp/C	ich Wah npressor remolo fibrato chorus langer Delay EFFECT ADJUST	REVERB REVERB LEVEL DEPTH
42		
Preset # 42 I think I'll call it:	Set TAP for _	beats/minute
(CHECK ONE) Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VI. Calif Mod  Calif Mod  CHECK ONE) Acoustic High Power Studio Tweed Studio Tweed Comp/Chorus Comp/C	nch Wah mpressor emolo fibratio horus langer Delay Echo Echo Echo Echo Echo Echo Echo Echo	REVERB REVERB LEVEL DEPTH
Preset #_43   1 think	Set TAP for _	beats/minute
CCHECK ONE   Acoustic   Blue Voodoo   Vintage Club   Flexwave   Ampeg VL   Calif Mod   C	npressor emolo fibrato fibrato chorus langer Delay Echo Echo Echo Echo Echo Echo Echo Echo	REVERB REVERB LEVEL DEPTH
44		
Preset # 44 I think I'll call it:	Set TAP for _	beats/minute
CHECK ONE   Acoustic   Blue Voodoo   Vintage Club   Flexwave   Ampeg VL   Calif Mod   Ca	ndr Wah mpressor emolo fibratio fibratio fibrorus langer Delay Echo Echo Echo Echo Echo Echo Echo Echo	REVERB REVERB LEVEL DEPTH
Preset # 45 I think I'll call it:	Set TAP for _	beats/minute
(CHECK ONE)  Acoustic Blue Voodoo  Vintage Club Flexwave Ampeg VI. Calif Mod  Calif Mod  CHECK ONE)  Acoustic Comp/Chorus Comp	ich Wah npressor emolo fibrato chorus alanger Delay Echo ADJUST	REVERB REVERB LEVEL DEPTH

31

beats/minute

Set TAP for

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

## DX-112/212 Digital Guitar Amplifier CRATE

### USER PRESETS 46-50 - BANK B

Preset #_46	I t	hink I'll call it:							_ Se	et TAP for _	bea	ats/minute
amp model: (Check one)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	*/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BASS	MID	(CI	EFFECT: HECK ONE) """  CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset # <u>47</u>	I t	hink I'll call it:							_ Se	et TAP for _	bea	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	*/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BASS	MID MID	(CI	EFFECT: HECK ONE) \( \alpha \) \( \alpha \)		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_48	I t	hink I'll call it:							_ Se	et TAP for _	bea	ats/minute
Preset # 48  AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	hink I'll call it:  Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	->\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BASS	MID	(CI	EFFECT: HECK ONE)	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	et TAP for	bea	ats/minute
AMP MODEL:	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK	GAIN	BASS	MID		HECK ONE)	Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo Chor/Echo	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT	REVERB LEVEL	REVERB
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60 SE a UK 70 SE a UK Fuzzbox	GAIN	BASS BASS	MID MID	TREBLE	HECK ONE)	Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH

EFFECT: Comp/Echo
(CHECK ONE) Comp/Chorus

TREBLE

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

Preset #\_50

AMP MODEL: (CHECK ONE) Clean

Acoustic

Blue Voodoo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

I think I'll call it:

Top Mount

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

High Power StudioTweed

### USER PRESETS 51-55 - BANK A

Preset # <u>51</u>	I think I'll call it:					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		] <u>;````</u> ` ; <u>``</u> ``` ; .	MID MID	TREBLE CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Cmp/Vlb/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_52	I think I'll call it	·				Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		· · · · · · · · · · · · · · · · · · ·	MID	CHECK ONE)  TREBLE CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vb/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_53	I think I'll call it	:				Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		] : `````\``; . : ```\``; .	MID	CHECK ONE)  TREBLE  CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Fig/Echo Cmp/Cho/Echo Cmp/Vb/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	α Ω REVERB LEVEL	REVERB DEPTH
Preset #_54	I think I'll call it:					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		] <u>;</u>	MID	CHECK ONE)  A CHANNEL LEVEL	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vlo/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_ <u>55</u>	I think I'll call it					Set	TAP for	bea	ts/minute
AMP MODEL: (CHECK ONE)		] <u>`````</u> `\``\`.	MID	(CHECK ONE)   TREBLE CHANNEL		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay	EFFECT	α Ω Ω REVERB	REVERB

33

## DX-112/212 Digital Guitar Amplifier CRATE

### USER PRESETS 56-60 - BANK B

Preset #_56	I think I'l	l call it:_								et TAP for _	be	ats/minute
AMP MODEL: (CHECK ONE)	Acoustic   Fill Blue Voodoo   St Vintage Club   File Standard   St Vintage Club   File Standard   S	Top Mount ligh Power udio Tweed Black Face arge Tweed sos Era UK Tos Era UK Fuzzbox	GAIN	BASS	MID	(CI	EFFECT: HECK ONE) a n CHANNEL LEVEL		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_ <u>57</u>	I think I'l	ll call it:_							5	et TAP for _	be	ats/minute
AMP MODEL: (CHECK ONE)	Acoustic F Blue Voodoo St Vintage Club F Flexwave La Ampeg VL Calif Mod 7	Top Mount ligh Power udio Tweed Black Face arge Tweed 50s Era UK TOS Era UK Fuzzbox	GAIN	BASS	MID MID	(CI	EFFECT HECK ONE) a a a a a a a a a a a a a a a a a a a	Comp/Echo Comp/Chorus Cmp/Hg/Echo Cmp/Cho/Echo Cmp/Cho/Echo Flange/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_58	S I think I'l	ll call it:_							5	et TAP for _	be	ats/minute
AMP MODEL: (CHECK ONE)	Acoustic   Fill Blue Voodoo   St Vintage Club   File Standard   St Vintage Club   File Standard   S	Top Mount ligh Power udio Tweed Black Face arge Tweed 50s Era UK TOS Era UK	GAIN	BASS	MID MID	(CI	EFFECT HECK ONE) \(\alpha\) \(\alpha\) \(\a		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_ <u>59</u>	I think I'l	ll call it:_								et TAP for _	be	ats/minute
AMP MODEL: (CHECK ONE)	Acoustic F Blue Voodoo St Vintage Club F Flexwave La Ampeg VL Calif Mod 7	Top Mount digh Power udio Tweed Black Face arge Tweed 30s Fra UK TOS Fra UK Fuzzbox	GAIN	BASS	MID	(CI	EFFECT HECK ONE) a a a a a a a a a a a a a a a a a a a		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Drocat # 60	) I think !!	ll call it:								ot TAD for	L-	ata/mimuta

AMP MODEL: (CHECK ONE) Clean

Acoustic

Blue Voodoo

Vintage Club

Ampeg VL

Calif Mod

Tube Rectifier

Top Mount High Power

StudioTweed

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

(CHECK ONE) Comp/Chorus

TREBLE

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

### USER PRESETS 61-65 - BANK A

Preset # 61 I think I'll call it:	Set TAP for _	beats/minute
CHECK ONE   Acoustic   High Power   Studio Tweed   Wintage Club   Calif Mod	nch Wah mpressor emolo hidratio chorus langer Delay Echo ADJUST	REVERB REVERB LEVEL DEPTH
Preset # 62	Sat TAD for	hooto/minuto
AMP MODEL: Clean   Top Mount   Top Mount   CHECK ONE)   Comp/Echo   Top Mount   CHECK ONE)   Comp/Chorus   Comp/Ch	set IAP IOF	beats/minute
Preset #63	Set TAP for _	beats/minute
CCHECK ONE   Acoustic   High Power   Studio Tweed	ch Wah mpressor remolo //bratio //bratio Langer Delay EFFECT Echo EFFECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_64	Set TAP for _	beats/minute
CCHECK ONE   Acoustic   High Power   Studio Tweed	npressor remolo //brato //brat	REVERB REVERB LEVEL DEPTH
Preset # 65	Sat TAP for	beats/minute
AMP MODEL: Clean   Top Mount   High Power   Studio Tweed   Arong VL   Calif Mod   Calif Mod   Top San UK   Calif Mod   Top San UK   Calif Mod   Top Mount   Top Mo	ich Wah mpressor remolo //brato langer langer Echo ADJUST	REVERB LEVEL DEPTH

35

Tremolo

Vibrato

Chorus Flanger Delay

Echo

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

## DX-112/212 Digital Guitar Amplifier TRATE

### USER PRESETS 66-70 - BANK B

Preset # 66

Blue Voodoo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

StudioTweed

Black Face

Large Tweed

60s Era UK

70s Era UK Fuzzbox

Preset #_66	I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo StudioTweed Vintage Club Black Face Flexwave Large Tweed Ampeg VL 60s Era UK Calif Mod 70s Era UK Tube Rectifier Fuzzbox	(8) = 8) (8) = 1	Temolo Vibrato Chorus Flanger Delay Echo Echo Echo Echo Echo Echo Echo Echo	REVERB REVERB LEVEL DEPTH
Preset # <u>67</u>	I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Black Face Flexwave Large Tweed Ampeg VL 60s Era UK Calif Mod 70s Era UK Tube Rectifier Fuzzbox	(8) = 8) (8) = 1	Temolo Chorus Delay Delay EFFECT Echo  Foundation  FOU	REVERB REVERB LEVEL DEPTH
Preset #_68	I think I'll call it:		Set TAP for	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Black Face Flexwave Large Tweed Ampeg VL 608 Era UK Calif Mod 708 Era UK Tube Rectifier Fuzzbox	(8) = 8) (8) = 1	Ouch Wah Compressor Tremolo Vibrato Chorus Delay Echo BEFFECT ADJUST	REVERB LEVEL DEPTH
Preset #_69	I think I'll call it:		Set TAP for	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Black Face Flexwave Large Tweed Ampeg VL 60s Era UK Calif Mod Top Stra UK Tube Rectifier Flexzbox	(8) = 8) (8) = 1	Temolo Vibrato Chorus Flanger Delay Echo ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_70	I think I'll call it:		Set TAP for	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power	(CLIECK ONE)	Touch Wah Compressor	

TREBLE

### USER PRESETS 71-75 - BANK A

Preset # 71 I think I'll call it:	Set	TAP for beats/minute
AMP MODEL: Clean   Top Mount   High Power   Blue Voodoo   Vintage Club   Flexwave   Ampeg VL   Calf Mod   Tube Rectifier   Tuzzbox   GAIN   BASS   Clean   Top Mount   High Power   Studio Tweed   Black Face   Large Tweed   G08 Era UK   Top Stra UK   GAIN   BASS   Control Top Mount   High Power   High Power   Top Mount   Top Mount   Top Mount   High Power   Top Mount   Top Moun	CHECK ONE)   Comp/Echo   Chorus   Flanger   Chor/Echo   Chor/Echo   Echo   Chor/Echo   C	EFFECT REVERB REVERB ADJUST LEVEL DEPTH
70		
Preset #_72 I think I'll call it:	Set	TAP for beats/minute
AMP MODEL: Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier Tuzzbox    Clean Acoustic Blue Voodoo	CHECK ONE)   Comp/Echo   Com	EFFECT REVERB REVERB ADJUST LEVEL DEPTH
Preset #_73 I think I'll call it:	Set	TAP for beats/minute
AMP MODEL: Clean Top Mount (CHECK ONE) Acoustic High Power	EFFECT: Comp/Echo Touch Wah  (CHECK ONE) Comp/Chorus Compressor	
Blue Voodoo Viritage Club Black Face Flexwave Ampeg VI. Calif Mod Tube Rectifier Fuzzbox Studio Tweed Tube Rectifier Fuzzbox	Cmp/Flg/Echo   Tienolo   Cmp/Flg/Echo   Cmp/Flg/Echo   Cmp/Flg/Echo   Cmp/Nb/Echo   Cmp/Nb/Echo   Cmp/Nb/Echo   Chorus   Flanger   Chorus   Flanger   Chor/Echo   Chorus   Flanger   Chorus   Chorus   Flanger   Chorus   Flanger   Chorus   Chorus   Flanger   Chorus	EFFECT REVERB REVERB ADJUST LEVEL DEPTH
Preset #_74 I think I'll call it:	Set	TAP for beats/minute
AMP MODEL: Clean   Top Mount   High Power   Studio Tweed   Slack Face   Large Tweed   Ampeg VL   Calif Mod   Tube Rectifier   Top Standard Transport   Top Mount   High Power   Studio Tweed   Black Face   Large Tweed   Large Tweed   Ampeg VL   Gold Fac UK   Top Standard Transport   Top Mount	CHECK ONE)  (CHECK ONE)  (CHECK ONE)  (COmp/Chorus  Comp/Chorus  Comp/Chorus  Comp/Chorus  Comp/Chorus  Comp/Chorus  Comp/Chorus  Irenolo  Comp/Chorus  Range/Echo  Comp/Chorus  Range/Echo  Chorus	EFFECT REVERB ADJUST LEVEL DEPTH
Preset #_75 I think I'll call it:	Set	TAP for beats/minute
AMP MODEL: Clean Top Mount High Power Blue Voodoo Vintage Club Black Face Flexwave Ampeg VL Calif Mod Tube Rectifier Fuzzbox Tube Rose Flexward Fuzzbox Fuzzbo	CHECK ONE   Comp/Edo   Comp/Chorus   Comp/Scho   Comp/Chorus   Comp/Scho   Comp/Scho   Tiemolo   Comp/Scho   Comp/Scho   Tiemolo   Comp/Scho   Chorus   Flanger   Chor/Scho   Chorus   Chorus   Flanger   Chor/Scho   Chorus   Cho	α α α α α α α α α α α α α α α α α α α

37

beats/minute

Set TAP for

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

## DX-112/212 Digital Guitar Amplifier TRATE

### USER PRESETS 76-80 - BANK B

Preset #_76	<u></u>	I think I'll call it:						:	Set TAP for _	bea	ats/minute
AMP MODEL (CHECK ONE		Top Mount High Power Studio Tweed Black Face Large Tweed 60s Fra UK 70s Fra UK	GAIN BASS	MID MID	(C)	EFFECT HECK ONE \(\alpha\)		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #	7	I think I'll call it:						:	Set TAP for _	bea	ats/minute
AMP MODEL (CHECK ONE		Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	$\bigcap_{\alpha \in \mathcal{A}} \bigcap_{\alpha \in \mathcal{A}} \bigcap_{$	MID	TREBLE	EFFECT HECK ONE		Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_ 78	3	I think I'll call it:							Set TAP for _	bea	ats/minute
AMP MODEL (CHECK ONE		Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK	GAIN BASS		(C	EFFECT HECK ONE	Comp/Echo Comp/Chorus Cmp/Flg/Echo Cmp/Cho/Echo Cmp/Vib/Echo Flange/Echo	Touch Wah Compressor Tremolo Vibrato Chorus Flanger	)	, , , , , , , , , , , , , , , , , , ,	
	idoc receiner	Fuzzbox	GAIN BASS	MID	TREBLE	CHANNEL LEVEL	Chor/Echo Rotating Spkr	Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_79		I think I'll call it:	GAIN BASS	MID	TREBLE			Delay Echo		LEVEL	DEPTH

CHECK ONE) Comp/Echo Comp/Chorus

TREBLE

Comp/Chorus

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

Preset #\_80

AMP MODEL: (CHECK ONE)

Clean

Acoustic

Blue Voodoo

Vintage Club

Ampeg VL

Calif Mod

Tube Rectifier

I think I'll call it:

Top Mount

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

High Power StudioTweed

## **CRATE** DX-112/212 Digital Guitar Amplifier

### USER PRESETS 81-85 - BANK A

Preset #_81 I think I'll call it:_		Set TAP for _	beats/minute
AMP MODEL: Clean   Top Mount   CHECK ONE)   Gleave   High Power   Blue Voodoo   Studio Tweed   Vintage Club   Black Face   Flexwave   Ampeg VL   Calif Mod   70s Fra UK   Tube Rectifier   Fuzzbox	(CHECK ONE)    Comp/Chorus   Comp/Rg/Echo   Tree	h Wah pressor molo wato orus orus ngger elay hho ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_82 I think I'll call it:_		Set TAP for _	beats/minute
Clean   Top Mount	(CHECK ONE)    Comp/Chorus   Comp/Rg/Echo   Trefair   CHANNET	h Wah pressor molo orus nger elay cho ADJUST	REVERB REVERB LEVEL DEPTH
Preset # 83 I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean Top Mount (CHECK ONE) Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier Fuzzbox	(CHECK ONE)    Comp/Chorus   Comp/Rg/Echo   Tree	h Wah pressor molo wrato orus ngger elaly cho ADJUST	REVERB REVERB LEVEL DEPTH
Preset # 84   I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean Top Mount (CHECK ONE) Blue Voodoo Viritage Club Flexwawe Ampeg VL Calif Mod Tube Rectifier Top Mount Top Mount High Power Studio Tweed Studio Tweed Black Face 60s Era UK 70s Era UK Fuzzbox	(CHECK ONE)    Comp/Chorus   Comp/Reficho   Tenero	h Wah pressor molo orusi	REVERB REVERB LEVEL DEPTH
Preset # 85 I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL:   Clean	(CHECK ONE)    Comp/Chorus   Comp/Rg/Echo   Trefair   CHANNET	h Wah pressor nolo varato organ elalay elalay eho ADJIUST	REVERB REVERB LEVEL DEPTH

## DX-112/212 Digital Guitar Amplifier CRATE

Set TAP for \_\_\_\_

Vibrato

Chorus Flanger Delay

Echo

Cmp/Cho/Echo

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

### USER PRESETS 86-90 - BANK B

Preset #\_86\_\_

Vintage Club

Ampeg VL

Calif Mod

Tube Rectifier

Black Face

Large Tweed

60s Era UK

70s Era UK Fuzzbox

I think I'll call it:\_

(CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	lop Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	GAIN	BASS	MID Δ	(CI	EFFEC I: HECK ONE)  CHANNEL LEVEL	louch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	effect ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_87	I thi	ink I'll call it:_						s	et TAP for _	bea	nts/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	GAIN	BASS	MID Δ	(CI	EFFECT: HECK ONE) \(\alpha\) \(\alpha\) \(\a	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	α Ω Ω REVERB DEPTH
Preset #_88	I thi	ink I'll call it:_						s	et TAP for _	bea	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	GAIN	BASS	MID	(CI	EFFECT: HECK ONE)  \[ \alpha  \begin{align*} \alpha   \begin{align*} \alpha   \begin{align*} \alpha   \qq	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_89	I thi	ink I'll call it:_						s	et TAP for _	bea	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier	Top Mount High Power Studio Tweed Black Face Large Tweed 60s Era UK 70s Era UK Fuzzbox	GAIN	BASS	MID MID	(CI	EFFECT: HECK ONE) \(\alpha\) \(\alpha\) \(\a	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Echo	EFFECT ADJUST	REVERB LEVEL	REVERB DEPTH
Preset #_90	I thi	ink I'll call it:_						 s	et TAP for _	bea	ats/minute
AMP MODEL: (CHECK ONE)	Clean Acoustic Blue Voodoo	Top Mount High Power StudioTweed	. 144.	. 144.	. 1447.		EFFECT: HECK ONE)	Touch Wah Compressor Tremolo	. \\	.\	. 144.

## **CRATE** DX-112/212 Digital Guitar Amplifier

### USER PRESETS 91-95 - BANK A

Preset #_91 I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean Acoustic Blue Voodoo Studio Tweed Vintage Club Flexwave Ampeg VL Calif Mod Tube Rectifier Fuzzbox	Comp/Echo   Comp	EFFECT ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_92 I think I'll call it:		Set TAP for	beats/minute
AMP MODEL:   Clean   Top Mount	Comp/Echo   Comp		REVERB REVERB LEVEL DEPTH
Preset #_93 I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean   Top Mount   Acoustic   High Power   Blue Voodoo   Studio Tweed   Vintage Club   Black Face   Flexwave   Ampeg VL   Calif Mod   Top Sera UK   Tube Rectifier   Fuzzbox	FFFECT: Comp/Echo   Comp/Chorus   Comp/Choru	_	REVERB REVERB LEVEL DEPTH
Preset #_94 I think I'll call it:		Set TAP for	beats/minute
AMP MODEL: (CHECK ONE)    Clean   Top Mount	FFFECT: Comp/Echo   Comp/Chorus   Comp/Choru	_	REVERB REVERB LEVEL DEPTH
Preset #_95 I think I'll call it:		Set TAP for _	beats/minute
AMP MODEL: Clean   Top Mount   High Power   Studio Tweed   Vintage Club   Elexance   Large Tweed   Ampeg VL   Calif Mod   Tube Rectifier   Fuzzbox	CHECK ONE   Comp/Etho   Comp/Chorus   Comp	EFFECT ADJUST	REVERB LEVEL DEPTH

## DX-112/212 Digital Guitar Amplifier CRATE

### USER PRESETS 96-100 - BANK B

Preset #\_96\_\_

AMP MODEL: (CHECK ONE)

Clean

Acoustic

Blue Voodoo

Vintage Club

Flexwave

Ampeg VL

Calif Mod

Tube Rectifier

Top Mount High Power StudioTweed

Black Face

Large Tweed

60s Era UK

70s Era UK

Fuzzbox

Preset # <u>96</u>	I think I'll call it:_		Set TAP for	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Flexwave Large Tweed Ampeg VL 605 Fra UK Calif Mod 705 Era UK Tube Rectifier Fuzzbox	GAN BASS MID TREBLE CHANNEL LEVEL    CHECK ONE   Comp/Echo   Comp/Chorus   Cmp/Chorus   Cmp/Chor	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Efre CT ADJUST	REVERB REVERB LEVEL DEPTH
Preset # <u>97</u>	I think I'll call it:_		_ Set TAP for _	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Flexwave Large Tweed Ampeg VL 60s Fra UK Calif Mod 70s Era UK Tube Rectifier Fuzzbox	GAN BASS MID TREBLE CHANNEL LEVEL    Comp/Echo   Comp/Chorus   Comp/Chor	Touch Wah Compressor Tremolo Vibrato Chorus Flanger Delay Effec T ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_98	I think I'll call it:_		_ Set TAP for _	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Black Face Flexwave Large Tweed Ampeg VL 605 Fra UK Calif Mod 705 Era UK Tube Rectifier Fuzzbox	GAIN BASS MID TREBLE CHANNEL LEVEL    CHECK ONE   Comp/Echo   Comp/Chorus   Cmp/Cho/Echo   Cmp/C	Touch Wah Compressor Tiremolo Vibrato Chorus Delay Effect Echo	REVERB REVERB LEVEL DEPTH
Preset #_99	I think I'll call it:_		Set TAP for	beats/minute
AMP MODEL: (CHECK ONE)	Clean Top Mount Acoustic High Power Blue Voodoo Studio Tweed Vintage Club Flexwave Large Tweed Ampeg VL 60s Era UK Calif Mod Tube Rectifier Fuzzbox	GAN BASS MID TREBLE CHANNEL LEVEL Comp/Echo Comp/Chorus Chor/Echo Comp/Chorus Chor/Echo Comp/Chorus Chor/Echo Comp/Chorus Chor/Echo Chor/Echo Chor/Echo Chor/Echo Chor/Echo Rotating Spkr	Touch Wah Compressor Tremolo Vibratio Chorus Flanger Delay Echo ADJUST	REVERB REVERB LEVEL DEPTH
Preset #_100	O I think I'll call it:_		_ Set TAP for _	beats/minute

EFFECT: Comp/Echo
(CHECK ONE) Comp/Chorus

Cmp/Flg/Echo

Cmp/Cho/Ech

Cmp/Vib/Echo

Flange/Echo

Chor/Echo

Rotating Spkr

Touch Wah

Compressor

Tremolo

Vibrato

Chorus Flanger Delay

Echo

### Appendix A

**Designer's Note: Amplifier Modeling:** 

Building an amplifier model is really not much different than building an actual amplifier. With an actual amplifier you start with components like tubes, transformers, resistors, capacitors, and a speaker, and put them together to create an amplifier. With a virtual amplifier you start with virtual components and put them together to create an amplifier model.

It all starts with what many consider to be the "magic" in the sound of many vintage amplifiers: the vacuum tube. We created a tube model flexible enough to emulate different types of vacuum tubes, from preamp tubes such as the 12AX7 to power amp tubes like the 6L6 and the EL84.

Next, we constructed models to duplicate the filtering and equalization that takes place between the gain stages of an amplifier. These equalization models are adaptable to precisely emulate the frequency characteristics of a specific amplifier's controls. We even created models for the output transformer and power supply sag characteristics.

After extensive research, we discovered that there's really no magic in the tube itself. Much of the tube amplifier sound is a result of not just the tube, but the way the tube interacts with the other components in the amplifier. We created our tube models to interact with the other components in our virtual amplifiers, just like the real thing.

After we developed our component models, we put them together to create our virtual amplifiers. We sound tested our amplifier models extensively to ensure that they remained true to the sound and feel of the original amplifier. Although we may have taken the magic out of the tube, we wanted to keep the magic of the tube *sound*.

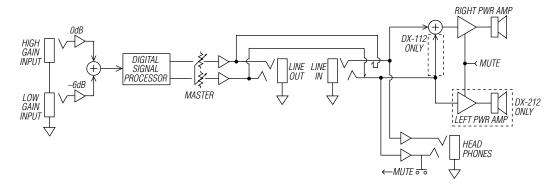
The diagrams on the following page show the signal chain of the DX-112/212 amplifier.

### DX-112/212 Digital Guitar Amplifier TRITE

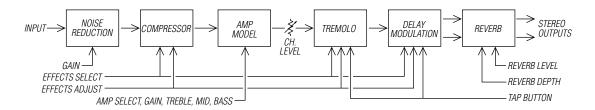


### **Block Diagrams:**

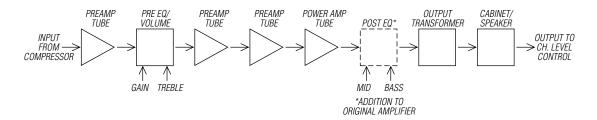
• The analog signal path, from the input jack to the speaker(s).



• The digital signal path, which is the path the signal takes inside the digital signal processor.



· A typical Amplifier Model. This simplified block diagram shows the digital signal path through the many virtual components of the Studio Tweed Amplifier Model. Note that the Fender Deluxe did not have a Mid or Bass control, so we added these controls post-gain.



### Appendix B

### **MIDI Implementation Chart:**

### [Crate Digital Guitar Amplifier] MODEL DX-112/212

			I	
Func	tion	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	X X	OMNI X	
Mode	Default Messages Altered	X X X	Mode 1 X X	
Note Number	True Voice	X X	X X	
Velocity	Note ON Note OFF	X X	X X	
After Touch	Key's Ch's	X X	X X	
Pitch Bender	Default	X	X	
Control Change		X X	X X	
Prog Change	True Number	X X	O X	0 – 99
System Exclusi	ive	X	X	
System Common	Song Pos Song Sel Tune	X X X	X X X	
System Real Time	Clock Commands	X X	X X	
Aux Messages	Local ON/OFF All Notes Off Active Sense Reset	X X X X	X X X X	
Notes				

Mode 1: OMNI ON, POLY Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO Mode 4: OMNI OFF, MONO O: YES X: NO

Date: 02/18/99

Version: 1.1

### DX-112/212 Digital Guitar Amplifier CRATE



### Appendix C

### **Specifications:**

### **Analog:**

Output Power Rating	DX-112 60 watts RMS; DX-212 100 watts RMS (50W RMS x 2)
Input Impedance	High gain 80k ohm; Low gain 150k ohm
Line Input Impedance	47k ohm
Line Output Impedance	1k ohm
Headphone Impedance	32 ohm minimum
Internal Speaker(s)	DX-112 (1) 12" Custom Eminence, 8 ohms; DX-212 (2) 12" Custom Eminence, 8 ohms
Power Requirements	120VAC, 60Hz, 200VA; 100/115VAC, 50/60Hz, 200VA; 230VAC, 50/60Hz, 200VA
Size and Weight	DX-112/212 21.4"H x 27.9"W x 10.2"D; DX-112 50 lbs; DX-212 57 lbs

### Digital:

Analog to Digital Conversion	20-bit Delta-Sigma w/64X oversampling
Digital to Analog Conversion	20-bit Delta-Sigma w/128X oversampling
Conversion Rate	46.875 kHz
Digital Signal Processor	24-bit operating at >40 million instructions/second

### **Final Note:**

No oversampling was used in our emulation software, and no animals were harmed during its design and development.

